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L1: Entry 6 of 60

File: DWPI

Oct 31, 2000

DERWENT-ACC-NO: 2001-053962

DERWENT-WEEK: 200120

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TITLE: Water sealing material that can easily realise durable and reliable high performance water sealing

PRIORITY-DATA: 1999JP-0114524 (April 22, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2000303059 A	October 31, 2000		006	C09K003/10

INT-CL (IPC): B32 B 5/18; B32 B 27/36; C09 J 7/02; C09 J 167/02; C09 J 169/00; C09 J 175/04; C09 K 3/10; E04 B 1/66; E04 B 1/684

ABSTRACTED-PUB-NO: JP2000303059A

BASIC-ABSTRACT:

NOVELTY - A novel water sealing material (P) is a foam that has either a closed cell structure or closed cell and continuous cell mixture structure and has partial or whole surface coated with pressure sensitive adhesive layer (A).

DETAILED DESCRIPTION - More in detail, (A) has at least on the outermost surface a pressure sensitive adhesive layer (A1) that contains polymer having at least one polycarbonate structure containing repeating units of -OROC(O)- where R = 2-20C optionally branched hydrocarbon group.

USE - (P) is suitably used for sealing water leakage from between two members.

ADVANTAGE - (P) can be easily applied with excellent applicability between two members without causing misarrangement like mispositioning and torsion because of its easy repositioning and realise durable and reliable high performance water sealing.

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L1: Entry 18 of 60

File: DWPI

Oct 19, 1999

DERWENT-ACC-NO: 2000-007109

DERWENT-WEEK: 200007

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TITLE: Adhesive sheet used in electronics devices - including adhesive composition having polycarbonate structure and film composed of polymer made from alpha-olefin

PRIORITY-DATA: 1998JP-0089676 (April 2, 1998)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11286660 A	October 19, 1999		006	C09J007/02

INT-CL (IPC): C09 J 7/02; C09 J 169/00

ABSTRACTED-PUB-NO: JP 11286660A

## BASIC-ABSTRACT:

Adhesive sheet includes a layer including an adhesive composition having a polycarbonate structure with repeating units having the following formula - (O-R-O-CO)n- (1), and a film composed of a polymer made mainly of an alpha-olefin having 4 or more carbon atoms or a film having a surface portion made of the above polymer as a peeling liner. R is a straight-chain or branched 2-20C hydrocarbon group.

USE - The adhesive sheet is used in electronic devices, etc.

ADVANTAGE - The adhesive sheet can avoid corrosion or erroneous operation inside the electronic devices, and excellent liner peeling performance even after heat hysteresis such as laminating.

## WEST Search History

DATE: Thursday, March 13, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
	<i>DB=DWPI; PLUR=YES; OP=OR</i>		
L4	L3 not l1	121	L4
L3	L2 and polycarbonate\$	127	L3
L2	((c09J175\$)!.IPC.)	3387	L2
L1	((c09J169\$)!.IPC.)	60	L1

END OF SEARCH HISTORY

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L4: Entry 8 of 121

File: DWPI

Oct 11, 2000

DERWENT-ACC-NO: 2000-666450

DERWENT-WEEK: 200105

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TITLE: Polyurethane molding composition useful for vehicle interiors and food packaging is prepared by reaction of 1,6-hexamethylenediisocyanate, aliphatic polyol and chain extender

INVENTOR: MUEHLFELD, H; WAGENER, S

PRIORITY-DATA: 1999DE-1015932 (April 9, 1999)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 1043349 A2	October 11, 2000	G	005	C08G018/42
JP 2000355619 A	December 26, 2000		006	C08G018/65
DE 19915932 A1	October 19, 2000		000	C08G018/73

INT-CL (IPC): A61 F 13/15; B60 K 13/02; B60 K 37/00; B60 R 13/02; C08 G 18/42; C08 G 18/44; C08 G 18/65; C08 G 18/73; C08 J 5/00; C08 L 75/04; C09 J 175/04; D06 M 15/564

ABSTRACTED-PUB-NO: EP 1043349A

## BASIC-ABSTRACT:

NOVELTY - A thermoplastic polyurethane molding composition is prepared by reaction of 1,6-hexamethylenediisocyanate, an aliphatic polyol (mol. wt. of 450-4000 g/mol; OH number 20-235) and a chain extender.

DETAILED DESCRIPTION - A thermoplastically processable polyurethane molding composition (I) is free of low molecular weight cyclic oligourethanes and has a high resistance to light. (I) is obtained by reaction of an aliphatic polyol having a molecular weight of 450-4,000 g/mol and an OH number of 20-235, preferably a polyadipate, polycaprolactone, polycarbonate, polytetrahydrofuran and/or corresponding polymers with 1,6-hexamethylenediisocyanate (HMD) and a chain extender, preferably 1,5-pentanediol, 1,6-hexanediol or 1,4-cyclohexanediol in an equivalent ratio of 1:1.5-1:14.0 (HMD to polyol), whereby the NCO number is 95-105 (quotient of the equivalent ratio of isocyanate groups to the sum of hydroxyl groups of the polyol and chain extender multiplied by 100)

USE - The thermoplastic polyurethane molding composition (I) is useful for the production of surface coverings for vehicle interiors, food packaging, molded articles, film and nonwoven materials for hygienic and medical applications, hot melt adhesives and adhesives for textiles. (claimed).

ADVANTAGE - Products prepared from (I) have a high stability to light and do not contain low molecular weight byproducts that can migrate.

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L4: Entry 41 of 121

File: DWPI

Sep 7, 1994

DERWENT-ACC-NO: 1994-272965

DERWENT-WEEK: 199434

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TITLE: Crosslinker for adhesives based on rubber or hydroxy:polyurethane(s) - comprises the reaction prod. of 2,4,6-tri-isocyanato-toluene with a polyether-, polyester-, alkane- or polycarbonate:poly:ol

INVENTOR: GANSTER, O; PANSKUS, K ; THIERY, U

PRIORITY-DATA: 1993DE-4306718 (March 4, 1993)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 613913 A1	September 7, 1994	G	008	C08G018/10
DE 4306718 A1	November 24, 1994		000	C09J175/04
JP 06322067 A	November 22, 1994		006	C08G018/76

INT-CL (IPC): C08G 18/10; C08G 18/32; C08G 18/42; C08G 18/44; C08G 18/48; C08G 18/67; C08G 18/69; C08G 18/76; C08G 18/80 ; C09J 121/00; C09J 175/04; C09J 175/14

ABSTRACTED-PUB-NO: EP 613913A

## BASIC-ABSTRACT:

Crosslinkers (I) for polymer adhesives are claimed, with viscosity 3-4000 mPa.s/25 deg. C (measured with a Rotovisco RV12 (RTM)). (I) are based on the reaction prods. of 2,4,6-triisocyanato-toluene (TIT) and polyether-, polyester-, alkane- or polycarbonate-polyols with OH no. 56-1867 and mean functionality 1.2-2.2 (II), contg. less than 1 wt.% residual TIT.

Also claimed are (i) a process for the prodn. of (I), by reacting TIT with polyols (II) in inert organic solvent at 10-100 deg. C, with ratio (OH gps.): (NCO gps.) = 1:(2.95-2.00); and (ii) use of (I) in the prodn. of adhesives.

USE - Used for the prodn. of adhesives based on natural or synthetic rubber or OH gp.-contg. polyurethanes (claimed). Applications include bonding textiles, leather, plastics, wood, paper and esp. rubber and flexible PVC.

ADVANTAGE - (I) are non-volatile crosslinkers which enable the prodn. of high-strength, temp.-resistant bonds, esp. with highly plasticised substrates, without discoloration (contrast prior-art tri-isocyanate-based crosslinkers (e.g. 4,4',4''-triphenylmethanetri-isoc-yanate or unmodified TIT).

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L4: Entry 44 of 121

File: DWPI

May 27, 1994

DERWENT-ACC-NO: 1994-210980

DERWENT-WEEK: 199426

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TITLE: Urethane! acrylate adhesives of good flexibility, heat and hydrolysis resistance  
- comprises urethane! acrylate! oligomer, and reactive diluent

PRIORITY-DATA: 1991JP-0049443 (March 14, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 06145636 A	May 27, 1994		005	C09J175/16

INT-CL (IPC): C09J 175/16

ABSTRACTED-PUB-NO: JP 06145636A

BASIC-ABSTRACT:

Adhesive comprises (A) urethane acrylate oligomer obtd. by reacting (a) 10-2000 pts. wt. aliphatic polycarbonate diol having repeating units of (I), (II) and (III) with a ratio of (I):(II)=7:3-3:7 by the number of repeating units and a % ratio of (I)+(II)+at least one (III): at least one (III)=100:0-10 by the number of repeating units, (b) 100 pts. wt. of a OH gp.-contg. (meth)acrylate, (c) 0.05-50 pts. wt. an active H-contg. alkoxysilane and (d) organic poly-isocyanate contg. 70-100 mol% of isocyanate gps w.r.t. total mol number of active hydrogens in (a)-(c); and (B) a reactive diluent.

In the formulae m,n = 4-6; m is not n; R<sup>7</sup>,R' = 2-6C alkylene.

USE/ADVANTAGE - Urethane acrylate adhesives have good flexibility, heat and hydrolysis resistance and adhesion to glass and polycarbonate resin sheets, can absorb generated stress and retain good adhesion and are suitable for glass-polycarbonate resin laminated sheets for car safety glass and light glass for high-rise buildings. Adhesive can be cured in a short time at a low temp. under a fluorescent lamp.

In an example, 500 pts. wt. of an urethane acrylate oligomer, 250 pts. wt. 2-hydroxypropyl acrylate, 125 pts. wt. tetrahydrofurfuryl acrylate and 125 pts. wt. 2-hydroxyethyl methacrylate as diluents and 20 pts. wt. 2-hydroxy-2-methyl-1-phenylpropane-1-one were mixed and the mixt. was stirred to give a photopolymerisable urethane acrylate adhesive.

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L4: Entry 73 of 121

File: DWPI

Oct 14, 1992

DERWENT-ACC-NO: 1992-341583

DERWENT-WEEK: 199635

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TITLE: One component reactive polyurethane adhesive cured by dielectric heating -  
contg. poly:ol and poly:amine cpds. with high equiv. wt. and poly:isocyanate

INVENTOR: COLINAS-MARTINEZ, J; GROEGLER, G ; HESS, H ; KOPP, R ; STEPANSKI, H

PRIORITY-DATA: 1991DE-4111655 (April 10, 1991)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 508259 A1	October 14, 1992	G	009	C09J175/04
ES 2087330 T3	July 16, 1996		000	C09J175/04
DE 4111655 A	October 15, 1992		006	C09J175/00
CA 2065177 A	October 11, 1992		000	C08G018/06
JP 05140527 A	June 8, 1993		007	C09J175/04
EP 508259 B1	June 5, 1996	G	008	C09J175/04
DE 59206454 G	July 11, 1996		000	C09J175/04

INT-CL (IPC): C08G 18/06; C08G 18/28; C08G 18/32; C08J 3/28; C09J 5/00; C09J 5/06; C09J 175/00; C09J 175/04

ABSTRACTED-PUB-NO: EP 508259A

## BASIC-ABSTRACT:

Reactive adhesive (I) based on polyurethane contains polyisocyanate(s) (II), polyol(s) (III) non-aromatic polyamine(s), (IV) and opt. conventional additives. The number average equiv. wt. of all (III) and (IV) is at least 500. Pref. the adhesive is cured by a h.f. a.c. electric field, esp. by microwaves.

USE/ADVANTAGE - (I) is a one-component system which can be cured by dielectric heating without difficulty. It is esp. suitable for bonding hardly power materials, e.g. glass, vitrified ceramics or plastics opt. reinforced e.g. with glass fibres.

In an example, 16 pts. suspension of K aluminosilicate (3 angstroms pore dia) in castor oil was added to a mixt. of 94 pts. wt. polyoxypropylene-oxyethylene ether triol (mol. wt. 6000) 6 pts. wt. 2,4-diamino-3,5-diethyltoluene (35% 2,6-isomer) 0.2 pt. 4,4'-diamino-3,3'-dimethyldicyclohexylmethane, 0.2 pt. Pb octoate and 0.1 pt. ethylhexanoic acid. The mixt. was degassed 1 h. at 80 deg.C in water pump vacuum. The 4 pts. coated pyrogenic SiO<sub>2</sub>, 15 pts. coated micronised talc, 10 pts. coated pptd. SiO<sub>2</sub> and 22.5 pts. dimerised 2,4-TDI were suspended in the mixt. homogenously

ABSTRACTED-PUB-NO:

## EP 508259B EQUIVALENT-ABSTRACTS:

Polyurethane-based reactive adhesives contg. in each case at least one stabilised polyisocyanate A chosen from the gp. comprising 1,5-naphthalene diisocyanate, dimeric 4,4'- diisocyanatodiphenylmethane, dimeric 2,4-diisocyanatotoluene, 3,3'-diisocyanato-4,4'-dimethyl-N,N'-diphenylurea and N,N'- bis-(4-(4- or 2-isocyanatophenylmethyl)-phenyl)urea at least one polyol B which has at least two hydroxyl gps. and is chosen from the gp. comprising polyesters, polyethers, polythioethers, polyacetals, polycarbonates, polyesteramides, castor oil, carbohydrates, starch, high molecular wt. polyhydroxyl cpds. contg. polyadducts of formaldehyde, phenols and/or amines or reaction prods. of polyisocyanates and

amino-functional cpds. or vinyl polymers and at least one non-aromatic polyamine C chosen from the gp. comprising ethylene diamine, 1-amino-3,3,5-trimethyl-5-aminomethyl-cyclohexane, 3,3'-dimethyl-4,4'-diamino-dicyclohexylmethane, diethylene triamine, methyl nonane diamine, polyoxypropylene ether triamine with an average molecular wt. of 403, and opt. conventional additives, characterised in that the numerical average of the equivalent wt. of all the polyols and polyamines concerned is at least 500.



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Generate Collection

Print

L4: Entry 93 of 121

File: DWPI

Dec 19, 1990

DERWENT-ACC-NO: 1991-039637

DERWENT-WEEK: 199106

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TITLE: Reactive hot melt adhesive - comprises polycarbonate urethane! prepolymer with isocyanate gps. and thickener

PRIORITY-DATA: 1989JP-0127363 (May 20, 1989)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 02305882 A	December 19, 1990		000	
JP 95017891 B2	March 1, 1995		008	C09J175/04

INT-CL (IPC): C08G 18/44; C09J 175/04

ABSTRACTED-PUB-NO: JP 02305882A

## BASIC-ABSTRACT:

Reactive hot melt adhesive comprises polycarbonate urethane prepolymer with isocyanate gps. in mol.

USE/ADVANTAGE - Provides reactive hot melt adhesives with hot melt- and reactive-type and reactive-type adhesives properties e.g. instant initial bond and heat resistant strengths and water moisture resistance. Addn. of thickener to hot melt adhesive also improves initial bond strength and bond strength after curing.

In an example, 100 wt. pts. of polycarbonate diol with mean mol.wt. of 1908 is dehydrated for 3 hrs. at 100 deg.C under 3 mmHg, to polycarbonate diol, is added to 18.2 wt. pts. of 2,5-tolylene diisocyanate, mixt. is reacted in N2 flow for 4 hrs. at 80 deg.C to give polycarbonate urethane prepolymer with NCO of 3.60% and viscosity at 80 deg.C of 7780 cP, 30 wt. pts. of satd. polyester is dehydrated for 2 hrs. at 140 deg.C under 3 mmHg, to satd. polyester, is added 70 wt. pts. of above prepolymer and mixt. is mixed in N2 flow for 30 min. at 120 deg.C to give a reactive hot melt adhesive with m.pt. of 65 deg.C, a melt viscosity at 120 deg.C of 26000 cP, initial bond strengths at 20 and 80 deg.C of 5.2 and 0.62 kfg/25mm and bond strengths after curing at -10, 20 and 80 deg.C of 15.1, 21.2 and 4.9 kgf/25 mm.

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Print

L4: Entry 103 of 121

File: DWPI

Feb 1, 1990

DERWENT-ACC-NO: 1990-079280

DERWENT-WEEK: 199011

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TITLE: Improved polyurethane-poly:ol-based polyurethane adhesive - obtd. by reacting  
polycarbonate-poly:ol with organic di:isocyanate

PRIORITY-DATA: 1988JP-0182267 (July 21, 1988)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 02032185 A	February 1, 1990		007	

INT-CL (IPC): C08G 18/44; C09J 175/04

ABSTRACTED-PUB-NO: JP 02032185A

## BASIC-ABSTRACT:

The adhesive is mainly composed of polyurethane-polyol (number-average molecular wt. 3,000-70,000) obtd. by reaction of polycarbonate-polyol (number-average mol.wt. 600-5,000) having main repeating unit (I) with organic diisocyanate. The adhesive also comprises organic polyisocyanate.

USE/ADVANTAGE - Excellent hot water resistance and chemical resistance in terms of adhesive force. Due to flexibility of the adhesive itself, flexible laminates can be prepd.

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L4: Entry 10 of 121

File: DWPI

Oct 14, 1999

DERWENT-ACC-NO: 1999-611031  
DERWENT-WEEK: 200224  
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TITLE: Adhesive for polyvinylchloride coated steel plates

INVENTOR: KONISHI, M

PRIORITY-DATA: 1998JP-0090488 (April 3, 1998)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9951700 A1	October 14, 1999	J	022	C09J174/04
US 20020035205 A1	March 21, 2002		000	C08F008/00
JP 11286672 A	October 19, 1999		006	C09J175/04
KR 2001013050 A	February 26, 2001		000	C09J175/04

INT-CL (IPC): C08 F 8/00; C08 G 18/00; C08 G 18/44; C09 J 174/04; C09 J 175/04; C09 J 187/00

ABSTRACTED-PUB-NO: US20020035205A

## BASIC-ABSTRACT:

NOVELTY - An adhesive comprises incorporating a urethane resin having a polycarbonate structure (B) into a curable resin (A), the main ingredient.

USE - For polyvinylchloride (PVC) coated steel plates.

ADVANTAGE - The adhesive has excellent solvent resistance and low-temperature impact resistance, has high adhesion to PVC films and steel plates, imparts a long lifespan and good processability to the steel plate, and there is no peeling of the PVC film even during boiling water processing. The strength of the adherence is shown by internal fracture of the PVC film during peeling tests.

ABSTRACTED-PUB-NO:

WO 9951700A EQUIVALENT-ABSTRACTS:

NOVELTY - An adhesive comprises incorporating a urethane resin having a polycarbonate structure (B) into a curable resin (A), the main ingredient.

USE - For polyvinylchloride (PVC) coated steel plates.

ADVANTAGE - The adhesive has excellent solvent resistance and low-temperature impact resistance, has high adhesion to PVC films and steel plates, imparts a long lifespan and good processability to the steel plate, and there is no peeling of the PVC film even during boiling water processing. The strength of the adherence is shown by internal fracture of the PVC film during peeling tests.